

**Notice of Allowability**

Application No.

10/038,073

Examiner

Thomas R Artman

Applicant(s)

LANIER ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 17 March 2004.
2. ☒ The allowed claim(s) is/are 1-3,6-11,13-23,25-34,36-44 and 69-80.
3. ☒ The drawings filed on 04 January 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 4/20/02; 6/4/02; 1/22/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

## **DETAILED ACTION**

### ***Allowable Subject Matter***

Claims 1-3, 6-11, 13-23, 25-34, 36-44 and 69-80 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art of record neither teaches nor reasonably suggests a fiber optic cable with a jacket that is formed from a material having a Shore A hardness of about 95 or less and having an average shrinkage of about 1% or less as required by the combination of claim 1.

Claims 2, 3, 5-11 and 13-22 are allowed by virtue of their dependency.

The prior art of record neither teaches nor reasonably suggests a fiber optic cable with a jacket that is formed from a material having an ultimate ASTM D-412 elongation in the range of about 350% to 700% and having an average shrinkage of about 2% or less measured about 1 hour after the test is conducted at 110 Centigrade for two hours with the cable core removed as required by the combination of claim 23.

Claims 25-33 are allowed by virtue of their dependency.

The prior art of record neither teaches nor reasonably suggests a fiber optic cable with a jacket that is formed from a material having a flexural modulus of 10,000 psi or less using ASTM D-790 and having an average shrinkage of about 2% or less measured about 1 hour after

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the test is conducted at 110 Centigrade for two hours with the cable core removed as required by the combination of claim 34.

Claims 36-44 are allowed by virtue of their dependency.

The prior art of record neither teaches nor reasonably suggests a fiber optic cable having a separation layer and a jacket that is also a part of an interconnect cable assembly that includes an optical connector, where the average delta insertion loss is about 0.03 dB or less at a reference wavelength of 1310 nm, 1550 nm or 1625 nm during a thermal cycle between a minimum temperature of -40 Centigrade and a maximum of 85 Centigrade as required by the combination of claim 69.

Claims 70-80 are allowed by virtue of their dependency.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cooper (US 4,881,795) discloses an optical fiber cable with a similar average delta insertion loss; however, there isn't any connector disclosed that is part of the cable assembly during the test.

Kannabiran (US 5,201,020) discloses an optical fiber with a similar average delta insertion loss; however, no jacket or separation layer is present during the test and no connector is disclosed.

Jamet (US 6,334,015) discloses an optical fiber cable with a similar average delta insertion loss; however, there isn't any separation layer or connector disclosed.

Melton (US 6,690,867) discloses an optical fiber cable assembly with a jacket, separation layer and connector; however, the average delta insertion losses are higher than claimed.

Commonly-owned Lanier (US 2003/0174989) and Register, III, (US 2003/0185529) teach similar cable structures with similar average delta insertion losses.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas R Artman whose telephone number is (571) 272-2485. The examiner can normally be reached on 9am - 6:30pm Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas R. Artman  
Patent Examiner  
April 12, 2004



EDWARD J. GLICK  
SUPERVISORY PATENT EXAMINER